



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/436,387	02/07/2000	ROLIN F. BARRETT JR.	133295.00111	6565
78435	7590	03/10/2010		
Pepper Hamilton LLP 400 Berwyn Park 899 Cassatt Road Berwyn, PA 19312-1183			EXAMINER GREGORY, BERNARR E	
			ART UNIT 3662	PAPER NUMBER
			MAIL DATE 03/10/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/436,387

Applicant(s)

BARRETT, ROLIN F.

Examiner

Bernarr E. Gregory

Art Unit

3662

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 30-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 30-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/02)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

1. The amendment of October 20, 2008 is non-compliant with 37 CFR 1.173 for being in improper format. In addition, the amendment of October 20, 2008 does not comply with 37 CFR 1.173(c) in that it does not clearly show the support for the new claims in the disclosure.
2. The original declaration of November 8, 1999 is objected to in that it lacks a proper mailing address. The post address given would not allow for mail to be delivered. The information in the "Post Office Address" box for the sole inventor only contains a street address, omitting the city and state for the address.
3. The reissue oath/declaration filed with this application is defective (see 37 CFR 1.175 and MPEP § 1414) because of the following:

The error recited in the June 20, 200 Declaration is not satisfactory. The Applicant needs to explain how the newly-added claim 32 differs from the original claim 1 (the claim the Applicant recites as containing the error) with respect to the error in claim 1 being corrected. The phrase, "overlimits the scope of the claim" should be changed to language that states that the means language causes the claim to be narrower than is necessary for patentability.

4. Claims 1-16 and 30-32 are rejected as being based upon a defective reissue declaration under 35 U.S.C. 251 as set forth above. See 37 CFR 1.175.

The nature of the defect(s) in the declaration is set forth in the discussion above in this Office action.

5. Claims 1-16 and 30-32 are rejected under 35 U.S.C. 251 as being an improper recapture of broadened claimed subject matter surrendered in the application for the patent upon which the present reissue is based. See *Pannu v. Storz Instruments Inc.*, 258 F.3d 1366, 59 USPQ2d 1597 (Fed. Cir. 2001); *Hester Industries, Inc. v. Stein, Inc.*, 142 F.3d 1472, 46 USPQ2d 1641 (Fed. Cir. 1998); *In re Clement*, 131 F.3d 1464, 45 USPQ2d 1161 (Fed. Cir. 1997); *Ball Corp. v. United States*, 729 F.2d 1429, 1436, 221 USPQ 289, 295 (Fed. Cir. 1984). A broadening aspect is present in the reissue which was not present in the application for patent. The record of the application for the patent shows that the broadening aspect (in the reissue) relates to claim subject matter that applicant previously surrendered during the prosecution of the application. Accordingly, the narrow scope of the claims in the patent was not an error within the meaning of 35 U.S.C. 251, and the broader scope of claim subject matter surrendered in the application for the patent cannot be recaptured by the filing of the present reissue application.

The independent claims 30 and 32 recapture broadened claimed subject matter in that each of these independent claims added during reissue is broader than independent claims 1 and 11 in that patent at least in that claims 30 and 32 are directed

solely to the light-processing aspect of the invention, which omit the "steering control" aspects of claims 1 and 11 of the patent and the "power supply means" of claim 1 of the patent. Particularly, in claim 32, the addition of the "steering control means" and the "power supply means" in patent claim 1 was a narrowing for which the breadth of claim 32 can not be recaptured. Similarly, in claim 30, the added method steps in patent claim 11 of "illuminating the target with a laser"; "firing said bullet from a precision sniper rifle having a smooth internal bore at said target"; "generating corrective signals in response to said electrical impulses" and "actuating said steering control means in response to said corrective signals in a manner to deflect air flow about said bullet to impart a correctional momentum to said bullet whereby said bullet is translated toward said optimum trajectory to impact said target" was a narrowing for which the breadth of claim 30 can not be recaptured. Dependent claim 31 recaptures in that it depends from independent claim 30, which recaptures. There appears to be nothing on the record that would indicate that the narrowing of claimed subject matter relating to claims 1 and 11 of the patent was done in error.

6. The Specification is hereby objected to under 37 CFR 1.71 in that it would not teach one of ordinary skill-in-the-art how to make and to use the invention commensurate in scope with the claims without undue experimentation.

Throughout the entire disclosure of the patent that is the subject of this reissue, the light source in a "laser." For example, see column 2, lines 55-67 of United States Patent 5,788,178 A. However, the claims 30-32 that have been

added during reissue state that the energy in the apparatus and method is "light." Light would include the entire electromagnetic spectrum, but Applicant has only disclosed laser light. Applicant has not disclosed the use of non-laser-light portions of the electromagnetic spectrum, such as RF, X-rays, and γ-rays. The apparatus and method for practicing the invention for non-laser-light portions of the spectrum would be so different than the apparatus and method disclosed for laser light that one of ordinary skill-in-the-art could neither make nor use the invention without undue experimentation. Thus, claims 30-32 are not enable be the Specification for non-laser-light portions of the spectrum. Claims must be enabled for their full breadth Sitrick v. Dreamworks, 516 F.3d 993 (Fed. Cir. 2008). Auto Techs. Int'l., Inc. v. BMW of N. Am., Inc., 501 F.3d 1274, 1285 (Fed. Cir. 2007).

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

8. Claims 30-32 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for laser light, does not reasonably provide enablement for non-laser-light portions of the electromagnetic spectrum. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and to use the invention commensurate in

scope with these claims. See the remarks with the objection to the Specification in section 6 above.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Underwood ('254).

With respect to independent claim 30, the method step of "sensing the reflection of light reflected off the target by at least two light detectors carried on the bullet" is met by the action of sensing of light reflected from target 14 in Figure 1 of Underwood ('254) as detected by two or more of the quadrants of the four-quadrant PIN diode 12. Please note that Underwood ('254) relates to a "missile" (column 3, lines 1-5). In the broad sense of the word "missile," the word refers to any object that is through space in a path, which would include a "bullet," as claimed.

As for the next method step of independent claim 30 of "each light generating an electrical signal that is a function of the intensity of the reflected light sensed by the light detector," this is met by the generating of an electrical signal by the four-quadrant PIN diode 12 in Figure 1 of Underwood ('254). The electrical signal from these quadrants

would be in some sense a function of the intensity of the light reflected light from target 14 that reaches the four-quadrant PIN diode 14.

The final step of independent claim 30 of "comparing, on board the bullet, the electrical signals of each light detector and producing an output signal that is a function of the bullet reorientation required to cause the electrical signals to approximate or equal each other" is met by the operation of at least the differential amplifier 40 and the limiter 42 in comparing the outputs of the four quadrants of the detector 12 in Figure 1 of Underwood ('254). The outputs of the quadrants are compared and are used to produce the steering commands 44 in Figure 1 of Underwood ('254). The four-quadrant detector 12 in Figure 1 of Underwood ('254) will steer the missile or bullet until the outputs of the quadrants are substantially equal, as claimed.

Since each and every method step of claim 30 is met by Underwood ('254), claim 30 is anticipated by Underwood ('254).

As for the further limitations of dependent claim 31, this is met in Figure 1 of Underwood ('254) by the four quadrant outputs where A is compared to C and D; and B is compared to C and D; and C is compared to A and B; and D is compared to A and B. The comparing is met at least by the action of the differential amplifier 40 in Figure 1 of Underwood ('254).

The remarks with respect to independent, apparatus claim 32 are substantially those given above with respect to corresponding independent, method claim 30.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bernarr E. Gregory whose telephone number is (571) 272-6972. The examiner can normally be reached on weekdays from 6:30 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza, can be reached on (571) 272-6979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bernarr E. Gregory/
Primary Examiner, Art Unit 3662